CITY OF LODI
INFORMAL INFORMATIONAL MEETING
"SHIRTSLEEVE" SESSION
CARNEGIE FORUM, 305 WEST PINE STREET
TUESDAY, MARCH 18, 2003

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, March 18, 2003, commencing at 7:02 a.m.

A. ROLL CALL

Present: Council Members – Beckman, Hansen, Land, and Mayor Hitchcock

Absent: Council Members – Howard*

Also Present: City Manager Flynn, City Attorney Hays, and City Clerk Blackston

*Absent due to attendance at the San Joaquin Council of Governments One Voice event in Washington, D.C.

B. CITY COUNCIL CALENDAR UPDATE

City Clerk Blackston reviewed the weekly calendar (filed).

City Manager Flynn announced that today was a historic period for the country, with the impending war with Iraq, and he expressed hope that the President, soldiers, and public safety personnel would remain in the forefront of citizen's thoughts through this difficult time.

C. TOPIC(S)

C-1 "Discussion of CalPERS retirement plan funding and future actuarial projections"

Human Resources Director Narloch introduced independent actuarial consultant John Bartel with Aon Consulting, and Bill Karch, and Ray Lane from CalPERS.

John Bartel explained that when an actuary prepares a valuation it represents a relationship/comparison between two items at a certain point in time: 1) actuarial liability – the value of benefits earned by members of the plan, and 2) actuarial value of assets – the value of contributions made including investment return reduced by benefits paid. When assets and liabilities are equal to each other the City's contribution is what actuaries refer to as the employer normal cost, i.e. the value of benefits being earned during the upcoming year, not provided by the employee contribution. When assets are equal to liabilities the City's contribution is the employer normal cost. When assets are greater than liabilities the City gets a credit. The funded status of the City's three CalPERS programs (Miscellaneous, Fire Safety, and Police Safety) is different.

The most recent information available from CalPERS is as of June 30, 2001. The June 30, 2001 information generates contribution information for the City for the 2003-04 fiscal year. CalPERS uses a "rolled forward" process that ignores the real market value rate of return subsequent to the valuation date. In effect, CalPERS assumes the rate of return during the two-year period will be 8.25%. The actual rates of return, however, are significantly different than the assumed rate.

Mayor Hitchcock asked Mr. Bartel to define super funded status.

Mr. Bartel stated that the present value of benefits is the present value of all expected benefits, i.e. those that have been earned and those that have yet to be earned. When a plan has assets greater than the actuarial liability, there is an excess. When assets are so large that they are greater than the present value of all benefits earned and those that are going to be earned, the plan is categorized by CalPERS as super funded. At that point in time, if all assumptions are met, then the plan has more money than it would need to take care of benefits earned and benefits that will be earned in the future. A plan being super funded can change dramatically from one year to the next.

In reply to Council Member Hansen, Mr. Bartel referred to pages 11 and 12 of his report (filed). The CalPERS market value rate of return is –7.23% and the actuarial rate of return is 4.8%. The reason for the difference is because CalPERS is "smoothing" market rates of return. In a bad year the smoothing process means that CalPERS does not recognize all of the losses immediately to avoid significant contribution fluctuation from one year to the next. The June 30, 2002 rate of return on a market value basis is –5.97% and the actuarial rate of return is –3.7%.

Mayor Hitchcock asked whether that was a smoothed rate over 20 years.

Mr. Bartel replied that it was not, and explained that CalPERS never lets the actuarial value get below 90% or above 110% of the market value. To determine the funded status of the plan they calculate an actuarial value and then roughly smooth in gains and losses over a three-year period. They roll the actuarial value forward at 8.25%, compare that to the market value, and adjust toward the market value by approximately one-third, never letting it get below 90% or above 110%.

City Manager Flynn noted that life insurance companies do not adjust their rates when there are market problems and asked why the CalPERS process is different.

Mr. Bartel explained that insurance companies charge policy holders a rate conservative enough to build in a profit. If clients live longer than they calculated, the insurance company makes money, if the client has a shorter life span than they calculated, the policy holder's estate makes money. CalPERS does not build in a profit. They make a best guess on what the numbers are going to be. The nature of a best guess is that half the time it is going to be too low and half the time it is going to be too high. In order to make a profit, insurance companies' calculations are right significantly more than half the time. There are two ways to get money into a retirement trust: 1) cash contribution (employee or city), and 2) investment return. If CalPERS is conservative about future investment return it would mean that the contributions have to increase.

Council Member Beckman asked how "smoothing" factors in to the 1998 CalPERS investment return of 19.8%.

Referencing pages 13 and 14, Mr. Bartel explained that when investment return is good the actuarial value lags behind, i.e. CalPERS is closer to 90% of market because it has not recognized all of the gains. When the market value rate of return is poor, the actuarial, or the recognition of that loss also lags behind. In 1996-2000 the funded status of the plan did not take into account the full investment gains. It was at an actuarial value below how much money was in the bank. In June 30, 2001 the actuarial value was slightly above the market value, i.e. it had not fully recognized all of the investment losses. From 1996-2000 the City has a "cushion," which works well with one year's worth of bad investment return. It does not work well in the second year of downturn. In 2000 the cushion is $3.5 million. The market value of assets went from $80.6 million to $73 million. With an expectation of 8.25% and a real market value return of –7%, it is a 15 percentage point difference between what CalPERS expected. At this point the City not only does not have a cushion, but the assets that are used to determine the contribution rate are higher than the amount of money the City has in the bank because CalPERS is smoothing a portion of the 15% differential.

Mayor Hitchcock asked how percentages are determined.

Referencing pages 15 and 16, Mr. Bartel pointed out the relationship between the actuarial value of assets and the actuarial liability in June 30, 1996. In 1993 through 1996 the assets and liability were equal to each other. From 1997 through 2000 there was a run-up in the asset value used to determine how well funded the plan is. Assets grew very rapidly and liabilities were growing relatively smoothly. In June 30, 2001 liabilities continued to grow; however, the assets did not grow as much. Depending upon what CalPERS gets as an investment return June 30, 2003, the rates of return will have essentially wiped out the gains that occurred at the end of the 1990s and early 2000.

Over time the City should expect the relationship in the funded status of the plan to get back to the point that it was at June 30, 1996. As the funded status gets eroded the City's contribution will get back to that normal cost and then depending upon what the investment return is in the out years, it may grow to greater than that normal cost rate. Page 16 shows an excess asset of $14.6 million at June 30, 2001. If CalPERS used the market value of assets to determine how well funded the plan was at June 30, 2002, then the $14.6 million would drop by $17 million and it still would not take into account a downturn in the market at June 30, 2003.

Council Member Beckman inquired what was "normal cost" to the City in 1996.

Referencing page 17, Mr. Bartel answered that it is relatively stable at approximately 7% of pay. He explained that the UAL amortization is a credit or addition based upon how well funded the plan is. In June 30, 1996 assets were modestly above liabilities and the City's contribution was reduced for that excess in assets. The reduction continued through June 30, 2001, so the City was contributing zero. In 1996 the City was contributing 1.3%. Page 18 shows that CalPERS indicated that if after June 30, 2000, all assumptions are met, the City could expect a zero contribution for 38 years. In June 30, 2001, the funded status of the plan changed and CalPERS indicated that the zero contribution period would drop down to 17 years. Pages 19 and 20 show that the valuation does not take into account real investment return after June 30, 2001. The CalPERS investment return June 30, 2002 is –5.97%. He reviewed the contribution projection on page 20 for June 30, 2003, using three different rates of return and noted that the CalPERS assumption is 8.25% for the next 40 years.

In reply to Council Member Hansen, Mr. Bartel reported that he has been doing actuarial work for 30 years. He stated that only twice in the history of CalPERS did it have rates of return below its expected rate of return. Three years of a negative return is unprecedented. If in the third year the rate of return is zero, which he stated would be challenging to reach, it would result in a 40% drop in three years.

Council Member Land interjected that it now appears theoretically possible to "break the bank".

Mr. Bartel stated that the City could, through financing, choose to pay off the unfunded liability over a period of up to 30 years. He again referred to projections on page 20, which show that in fiscal year 2005-06 the rate will be at 20%. The contributions generated by CalPERS are set up as a level percentage of pay with aggregate payroll growing. If the amortization period is longer than 17 years the City would have a negative amortization. With a 30-year amortization the unfunded liability grows for a long period of time. Mr. Bartel said that financing is the only option the City has to mitigate the rates.

Mayor Hitchcock referred to a report from the League of California Cities Employee Relations Institute (filed), which indicated that the unfunded liability was smoothed over a 20-year period.

Mr. Bartel replied that when assumptions are changed CalPERS' normal procedure is to amortize that over 20 years; however, most Miscellaneous plans use a rolling 13-year period.

In answer to Mr. Flynn, Mr. Bartel explained that smoothing means that when you have one good year your rate will remain relatively high; however, when you have two good years you will see a marked drop off in the contribution rate. He stated that 2006-07 will be the first year that it will be possible to be impacted by a good year.

Council Member Land asked who determined the 8.25% rate of return.

Mr. Bartel replied that the CalPERS Chief Actuary determines the rate of return and it is approved by the CalPERS board. Under Proposition 162 the Board has the authority for setting the assumptions. The CalPERS Chief Actuary has reported that its external

investment advisors believe 8.25% over a long period of time is a reasonable assumption. Mr. Bartel explained that contributions would go up if the rate was lowered and conversely the contributions would go down if the rates were raised.

In response to Mayor Hitchcock, Mr. Bartel stated that of the 100 agencies he works for less than five set aside in both good and bad years a reserve (contributions for its employees) based on an 8.25% return. In answer to Mr. Flynn, Mr. Bartel acknowledged that the amount these cities set aside was still not enough, as no one predicted the severity of the current situation with CalPERS.

Ray Lane introduced himself as the manager of the actuaries that do public agency cost evaluations. In answer to questions posed by Council Member Hansen he reported that CalPERS is the largest retirement system in the United States after the Federal government. He stated that the PERS fund has done far better than the investment market in general. They are invested 60% in the stock market, but it is extremely diversified. City employees in the CalPERS system have not suffered due to the downturn in the market because they are insured. They are promised that their benefit will be a certain percentage (3%) times their pay, times their years of service (starting at age 50), and paid for the rest of their lives. They are guaranteed a benefit independent of the investment performance of the fund.

Council Member Hansen asked what is being done in terms of management to try to get the situation controlled.

Mr. Lane conjectured that in this circumstance a private corporation would terminate the plan, pass an amendment shutting off benefits so that they would not accrue anymore, and cut its losses. He noted, however, that the State and CalPERS have a promise to continue the benefits and he did not believe that the City could even reduce them prospectively.

Mr. Flynn interjected that contributing to this problem is the expense side, e.g. an increase in retirees, disabled retirees, and hiring more people than what was anticipated.

Mr. Lane acknowledged that the increase to Safety benefits of 3% at 50 years increased the benefits and contributed somewhat to the situation today. He stated that it is typical for police and fire benefits to be close to 50% of pay when projected out.

Mayor Hitchcock asked Mr. Flynn to provide Council with a report on how this situation translates into dollars.

Mr. Lane stated that the City could apply for a hardship request which, if approved, would decrease the Miscellaneous rate by 2% and decrease Safety by 9%.

To illustrate a point, Mr. Flynn asked whether it would be possible for the City to terminate its relationship with CalPERS, continue to contribute for those employees who are currently in PERS, and put all future employees in a different system.

Mr. Lane replied that CalPERS has a termination provision for agencies that go out of business. He stated that those employees would not get future benefits.

Mr. Bartel added that the California Supreme Court has clearly said that the promise to the employees must remain intact. A municipality could withdraw from CalPERS, but it would still be obligated to provide that benefit promise to its employees. The City could keep all current employees in CalPERS, maintain the funded status of that program, and then provide a separate system for future hires.

Mr. Flynn pointed out that it would take 15 to 20 years before there would be a sufficient number of employees in a new system to offset CalPERS. There would be no short-term benefit and it could be even more expensive initially because of the cost involved in

setting up a new system. In reply to Council Member Hansen, Mr. Flynn confirmed that he was not considering terminating CalPERS.

In response to comments made by Council Member Beckman, Mr. Bartel explained that the fiduciary responsibility and cost of setting up a parallel system to CalPERS would not be desirable or efficient for the City. He stated that, generally, only very large entities and counties have their own retirement systems. He reported that the state is considering borrowing money to pay its current or short-term contributions.

Mr. Flynn stated that the Governor has encouraged employees to retire by giving an incentive package and then promising to hire them back in their existing job at the same salary. It is a way to shift payroll from the state budget over to CalPERS. Additionally, he pointed out that when CalPERS introduced the benefit of 3% at age 50, it was soon considered "normal and usual" by arbitrators and was no longer really a choice for City's to make. Mr. Bartel confirmed this by stating that 90% of the agencies he works for offer the benefit of 3% at age 50.

In answer to Mr. Flynn, Mr. Lane explained that if the City borrowed money at 6% to pay off its future liability, it would lose money if the actual return in CalPERS was less than 6%.

D. COMMENTS BY THE PUBLIC ON NON-AGENDA ITEMS

None.

E. ADJOURNMENT

No action was taken by the City Council. The meeting was adjourned at 8:56 a.m.

ATTEST:

Susan J. Blackston
City Clerk

Mayor's & Council Member's Weekly Calendar

WEEK OF MARCH 18, 2003

Tuesday, March 18, 2003

Reminder	**Howard.** San Joaquin Council of Governments One Voice Conference, Washington D.C., March 16 – 21, 2003.
7:00 a.m.	Shirtsleeve Session 1. Discussion of CalPERS retirement plan funding and future actuarial projections (HR)

Wednesday, March 19, 2003

11:00 – 1:00 p.m.	El Concilio Coalition Meeting, Salem Methodist Church, 345 East Elm Street, Lodi. Speakers will include Lodi Police Chief and Fire Chief.
7:00 p.m.	City Council Meeting (Note: No Closed Session)

Thursday, March 20, 2003

11:30 a.m.	**Hansen.** The Women's Center of San Joaquin County is 23rd Annual Luncheon, Stockton Civic Auditorium. Doors open at 11:00 a.m.
2:00 – 3:00 p.m.	**Land.** Reception to honor California State Senator Chuck Poochigian, 703 West Pine Street, Lodi.
2:00 – 6:00 p.m.	Tokay Dialysis Center Open House, 312 South Fairmont Street, Suite A, Lodi.
5:30 p.m.	Joint Meeting Lodi City Council and the Lodi Broad of Trustees, Lodi Public Library.
5:30 – 7:30 p.m.	Small Business Committee Networking Mixer, Classic Living, 111 South School Street, Lodi.
Reminder	LCC 2003 Planners Institute, San Diego, CA. March 20 – 22, 2003.

Friday, March 21, 2003

Saturday, March 22, 2003

Sunday, March 23, 2003

4:30 p.m.	**Hitchcock and Hansen.** Lodi Community Art Center's 43rd Annual Spring Art Show and Awards Ceremony, Robert Mondavi Woodbridge Winery, 5950 Woodbridge Road, Acampo. Show runs March 21 – 23, 2003.

Monday, March 24, 2003

Disclaimer: This calendar contains only information that was provided to the City Clerk's office

CITY OF LODI
MISCELLANEOUS, FIRE SAFETY & POLICE SAFETY PLANS

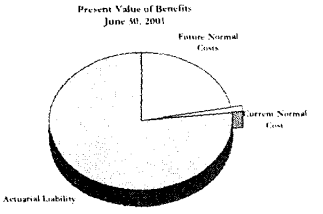
CalPERS Actuarial Issues – 6/30/01 Valuation

JOHN E. BARTEL, *Aon Consulting*

March 18, 2003

Miscellaneous

Definitions



- **PVB - Present Value of all Projected Benefits:**
  - Discounted value (at valuation date - 6/30/01), of all future expected benefit payments based on various (actuarial) assumptions
- **Actuarial Liability:**
  - Discounted value (at valuation date) of benefits earned through valuation date [value of past service benefit]
  - Portion of PVB "earned" at measurement
- **Current Normal Cost:**
  - Portion of PVB allocated to (or "earned" during) current year
  - Value of employee and employer current service benefit

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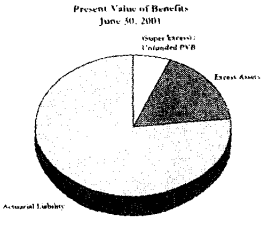
Definitions



- **Target-** Have money in the bank to cover Actuarial Liability (past service)
- **Unfunded Liability -** Money short of target <u>at valuation date</u>
- **Excess Assets / Surplus:**
  - Money over and above target <u>at that point in time</u>.
  - Doesn't mean you're done contributing.
- **Super Funded:**
  - Assets cover whole pie (PVB)
  - If everything goes exactly like PERS calculated, you'll never have to put another (employer or employee) dime in.

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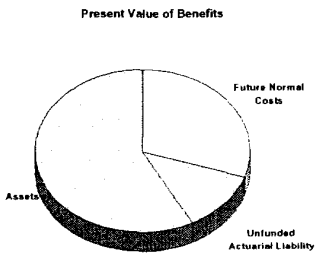
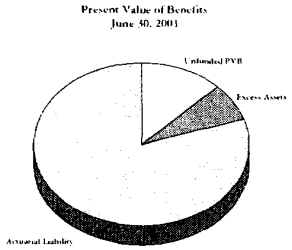
Definitions

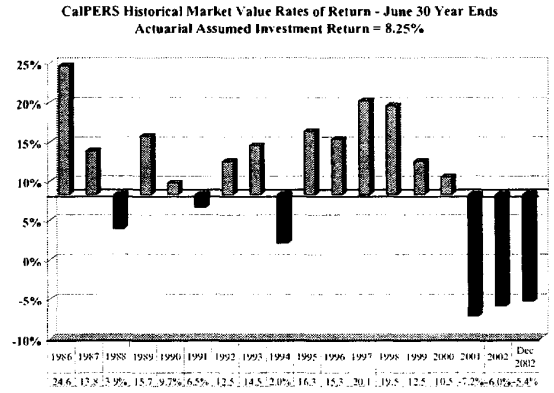




- Contribution =
  - Normal Cost
  - + Unfunded Liability Amortization
    or
  - - Excess Asset Amortization

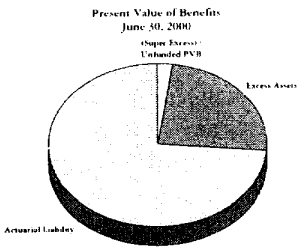
Future Rate Fluctuations

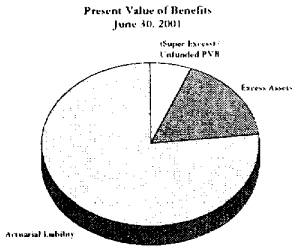
- Asset Gains/Losses:



- Actuarial Assumption changes:
- Experience Gains/Losses
- Pooling
- Benefit Improvements

Plan Funded Status
Miscellaneous





June 30, 2000		June 30, 2001
$ (1,700,000)	**(Super Excess) / Unfunded PVB**	$ 5,000,000
18,900,000	**Excess Assets**	14,600,000
57,600,000	**Actuarial Liability**	64,000,000
74,900,000	**PVB**	83,600,000

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Plan Funded Status
Miscellaneous

- What happened between 6/30/00 and 6/30/01?
  - Asset gain/(loss): ≈ (2.7) million
  - Actuarial gain/(loss): ≈ (2.3) million
    - Number of Actives 312 → 340
    - Number of Inactives 192 → 178
    - Number of Retirees 288 → 303

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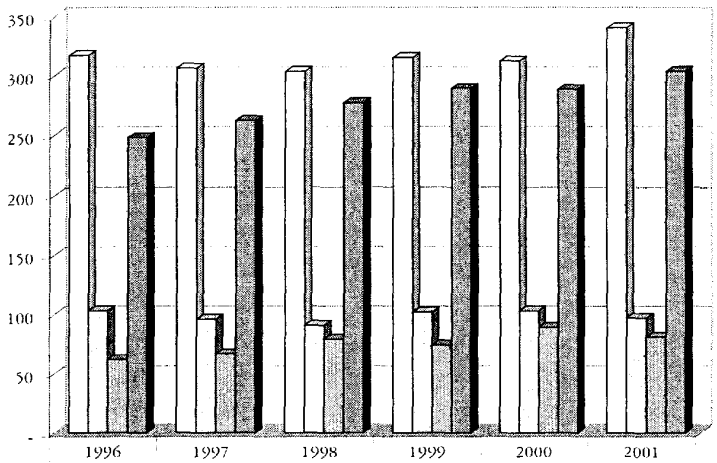
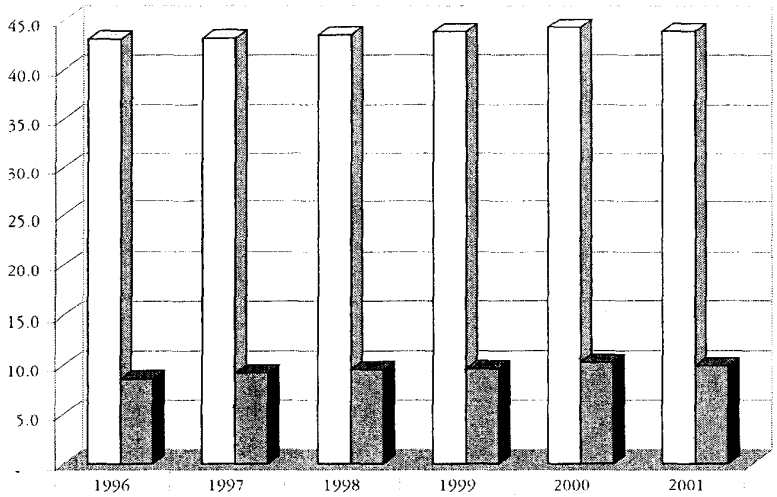
Members Included in Valuation
Miscellaneous



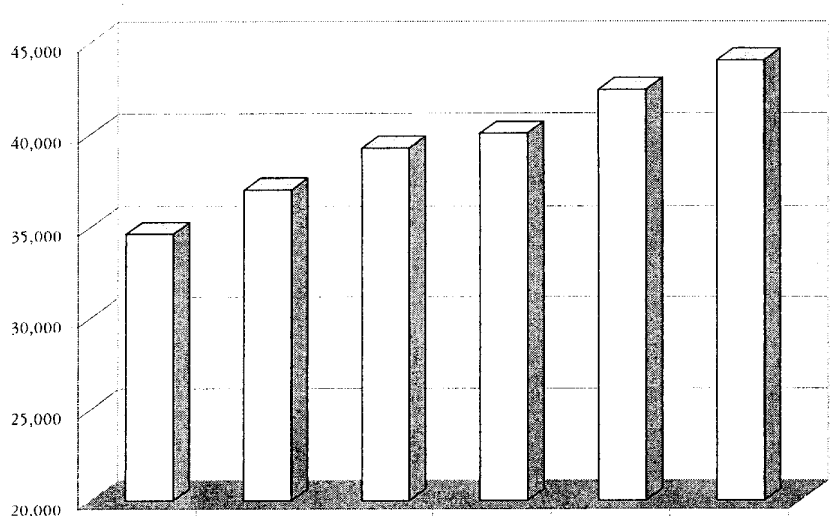
	1996	1997	1998	1999	2000	2001
Active	317	306	303	315	312	340
Transfers	103	96	91	102	103	97
Vested Terminations	62	67	79	74	89	81
Receiving Payments	248	262	277	289	288	303

Average Age/Service
Miscellaneous



	1996	1997	1998	1999	2000	2001
Average Age	43.1	43.1	43.5	43.8	44.2	43.8
Average Service	8.6	9.2	9.5	9.6	10.3	9.9

Average Pay
Miscellaneous



	1996	1997	1998	1999	2000	2001
Average Pay	34,600	37,000	39,200	40,000	42,400	44,000

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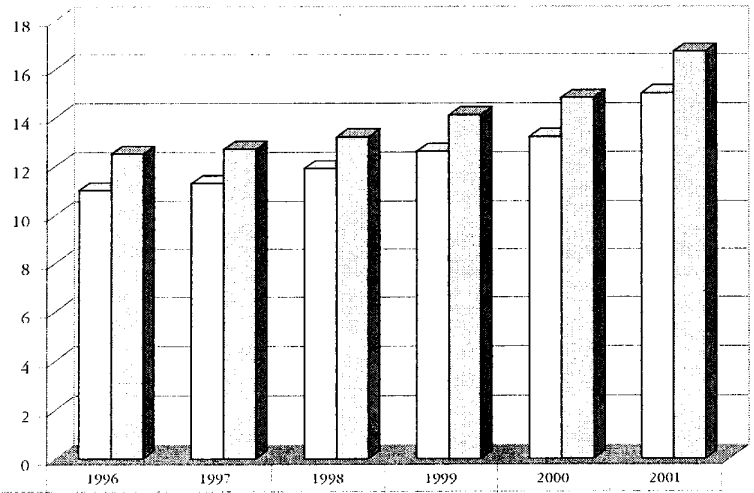
Total Annual Covered Payroll (Millions)
Miscellaneous



	1996	1997	1998	1999	2000	2001
Annual Covered Pay	11.0	11.3	11.9	12.6	13.2	15.0
Proj. Covered Pay	12.5	12.7	13.2	14.1	14.8	16.7

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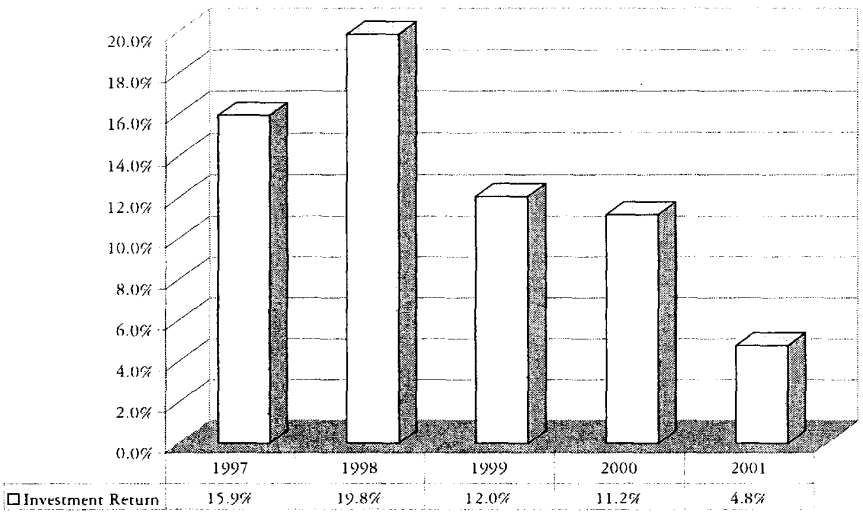
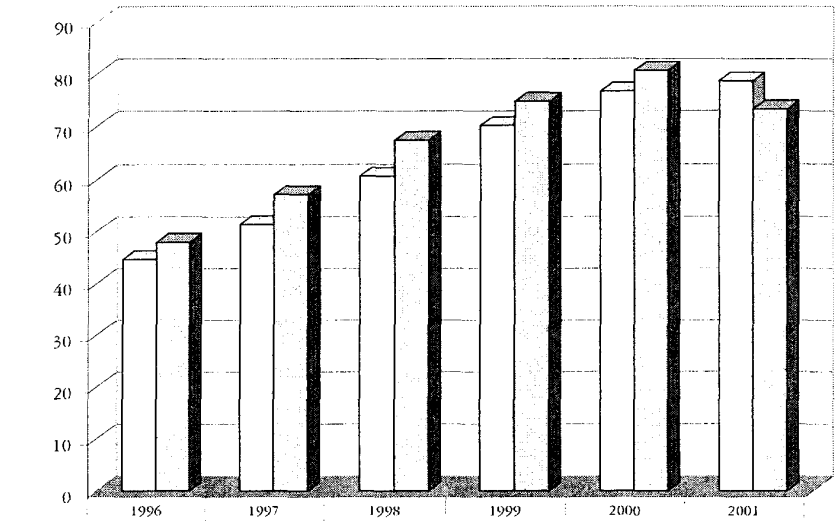
Actuarial Investment Return
Miscellaneous



Actuarial Investment Return
Miscellaneous

- Above assumes contributions, payments, etc. received evenly throughout year.
- 6/30/01:
  - Market Value return ≈ (7.23)%
  - Actuarial Value return ≈ 4.8%
- 6/30/02:
  - Market Value return ≈ (5.97)%
  - Actuarial Value return ≈ (3.7)%
- 6/30/03:
  - Market Value return through 1/31/03 ≈ (6.8)%

Asset Values (Millions)
Miscellaneous



	1996	1997	1998	1999	2000	2001
Actuarial	44.6	51.4	60.6	70.1	76.6	78.6
Market	47.9	57.1	67.3	74.7	80.6	73.2

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Asset Values
Miscellaneous

- 6/30/00 Actuarial Value ≈ 95% Market
- 6/30/01 Actuarial Value ≈ 107% Market
- 6/30/02 Actuarial Value will be ≈ 110% Market

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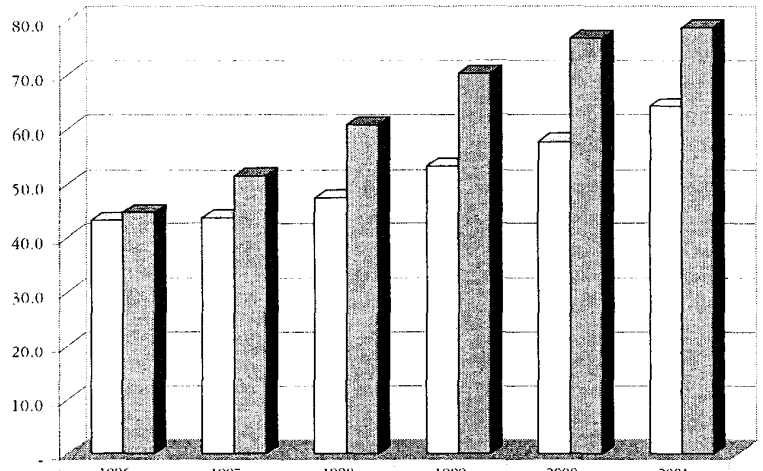
Funded Status (Millions)
Miscellaneous



	1996	1997	1998	1999	2000	2001
Actuarial Liability	43.1	45.6	47.3	55.2	57.6	64.0
Actuarial Asset Value	44.6	51.4	60.6	70.1	76.6	78.6

Funded Status
Miscellaneous

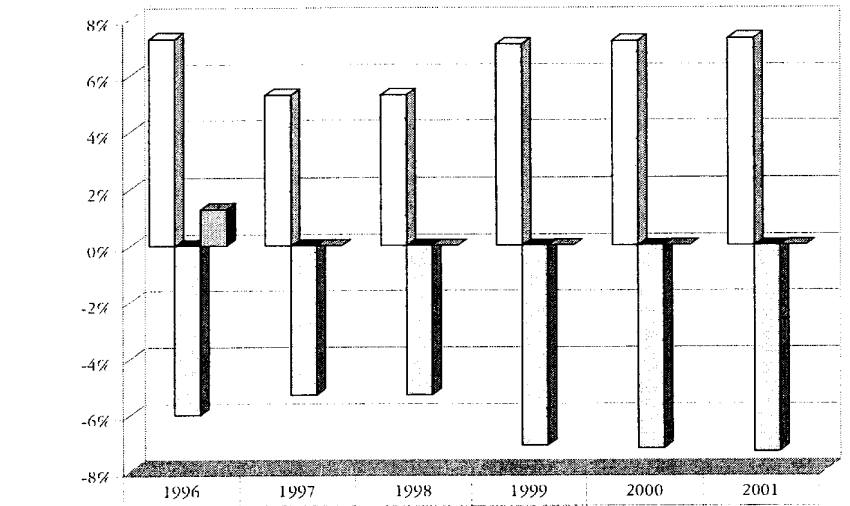
- 6/30/97 actuarial assumption changes:

		6/30/96	6/30/97
• Interest rate			
	☐ General inflation	4.50%	3.50%
	☐ Real rate of return	4.00	4.75
	☐ Total	8.50	8.25
• Payroll growth		4.50%	3.75%

- Investment losses – Impact on funded status:

• 6/30/02 [-5.97% compared to +8.25%]	-14.3%
• Actuarial asset "reserve"	-7.3%
• Total estimated % loss	-21.6%
• Total estimated $ loss [21.6% x $78.6]	$ 17.0 million

Contribution Rates
Miscellaneous



	1996	1997	1998	1999	2000	2001
Normal Cost	7.3%	5.3%	5.3%	7.1%	7.2%	7.3%
UAL Amort	-6.0%	-5.3%	-5.3%	-7.1%	-7.2%	-7.3%
Total	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%

Contribution Rates
Miscellaneous

	6/30/00 2002/2003	6/30/01 2003/2004
■ Normal cost	**7.2%**	**7.3%**
■ Amortization bases:		
● Fresh Start 6/30/00	-7.2%	0.0%
● Fresh Start 6/30/01	0.0%	-7.3%
Sub-total	-7.2%	-7.3%
● **Total:**	**0.0%**	**0.0%**
● Amortization period	39 years	17 years

■ 6/30/02:
- Significant asset loss
- Actuarial gains or losses?

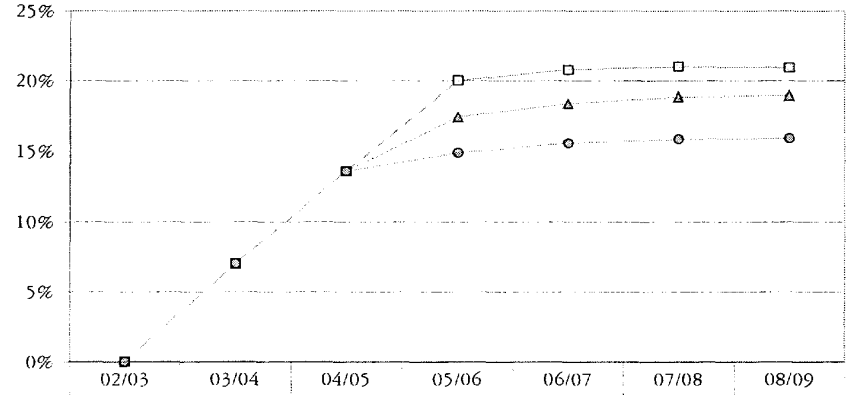
Contribution Projection
Miscellaneous

- Market Value Investment Return:
  - June 30, 2002 -5.97%
  - Expected June 30, 2003 **8.25%**
    0.00%
    -5.00%
  - Expected June 30, 2004 and subsequent 8.25%
- Fresh Starts:
  - No Fresh Starts
- No Other:
  - Gains or Losses
  - Method or Assumption Changes
  - Benefit Improvements

AON

Contribution Projection
Miscellaneous

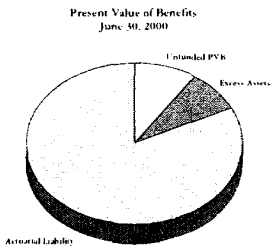
6/30/03 Market Value Return Varies
Includes City and Employee Contribution Rates

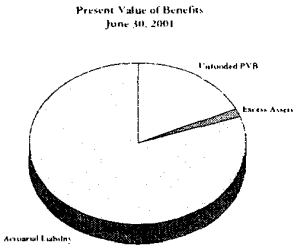


	02/03	03/04	04/05	05/06	06/07	07/08	08/09
□ -5.00%	0.0%	7.0%	13.6%	20.0%	20.8%	21.0%	20.9%
△ 0.00%	0.0%	7.0%	13.6%	17.4%	18.4%	18.9%	18.9%
○ 8.25%	0.0%	7.0%	13.6%	14.9%	15.6%	15.9%	15.9%

AON

Plan Funded Status
Fire Safety





June 30, 2000		June 30, 2001
$ 2,900,000	**Unfunded PVB**	$ 6,200,000
2,500,000	**Excess Assets**	500,000
24,900,000	**Actuarial Liability**	27,400,000
30,300,000	**PVB**	34,000,000

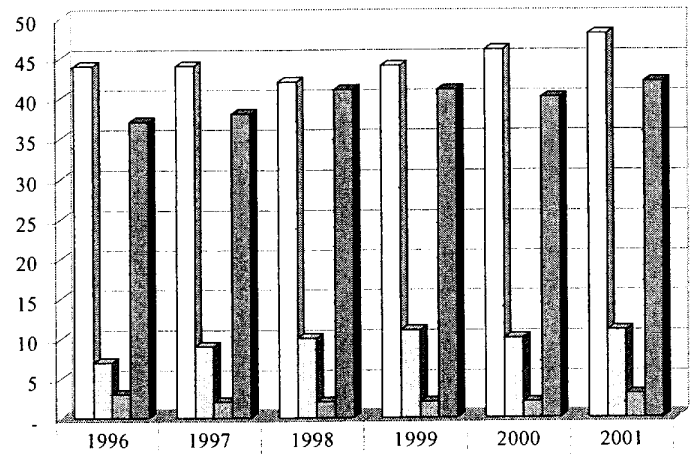
AON

Plan Funded Status
Fire Safety

- What happened between 6/30/00 and 6/30/01?
  - Asset gain/(loss): ≈ (0.9) million
  - Actuarial gain/(loss): ≈ (0.9) million
    - Average Salary 53,600 → 60,900
  - Law Change: ≈ 0.1 million
    - 85% → 90%

AON

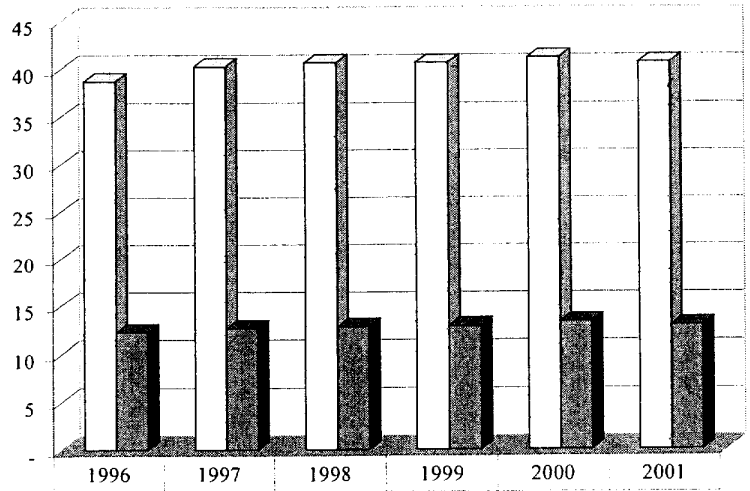
Members Included in Valuation
Fire Safety



	1996	1997	1998	1999	2000	2001
Active	44	44	42	44	46	48
Transfers	7	9	10	11	10	11
Vested Terminations	3	2	2	2	2	3
Receiving Payments	37	38	41	41	40	42

AON

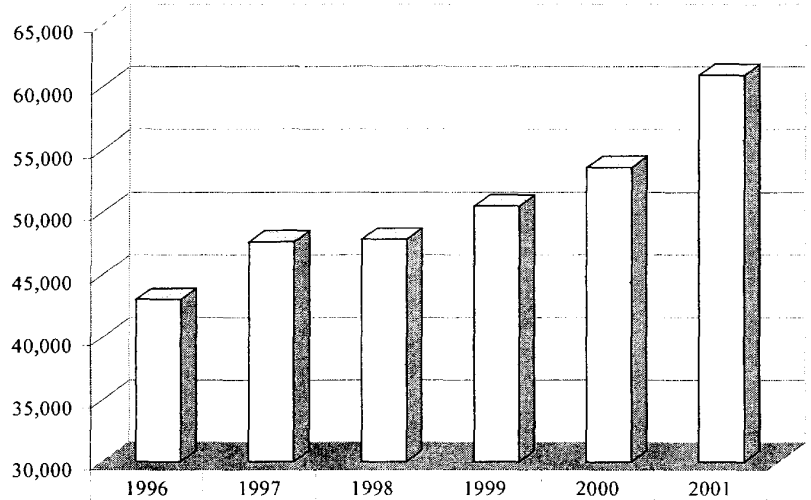
Average Age/Service
Fire Safety



	1996	1997	1998	1999	2000	2001
Average Age	38.7	40.2	40.6	40.6	41.1	40.6
Average Service	12.2	12.6	12.8	12.9	13.3	12.9

AON

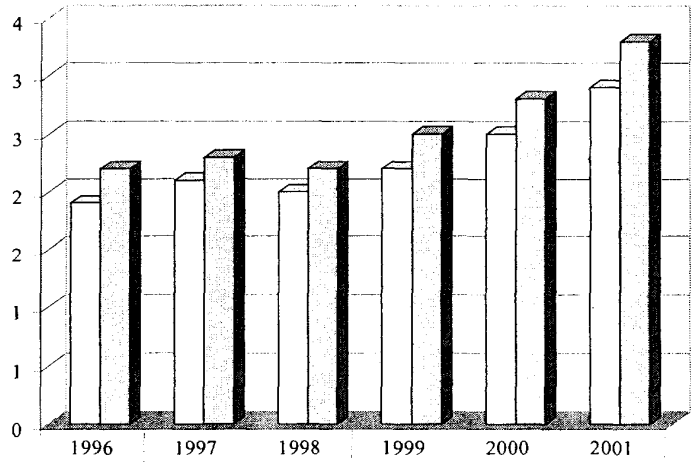
Average Pay
Fire Safety



	1996	1997	1998	1999	2000	2001
☐ Average Pay	43,000	47,600	47,800	50,500	53,600	60,900

AON

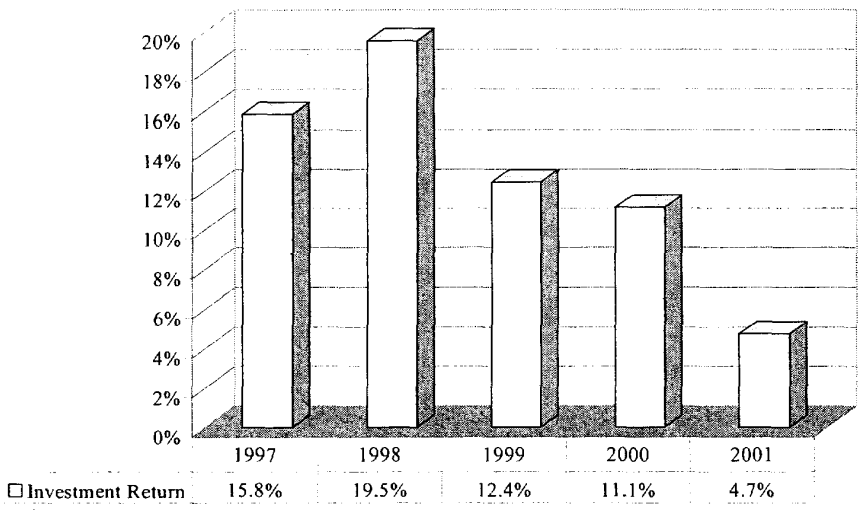
Total Annual Covered Payroll (Millions)
Fire Safety



	1996	1997	1998	1999	2000	2001
☐ Annual Covered Pay	1.9	2.1	2.0	2.2	2.5	2.9
☐ Proj. Covered Pay	2.2	2.3	2.2	2.5	2.8	3.3

AON

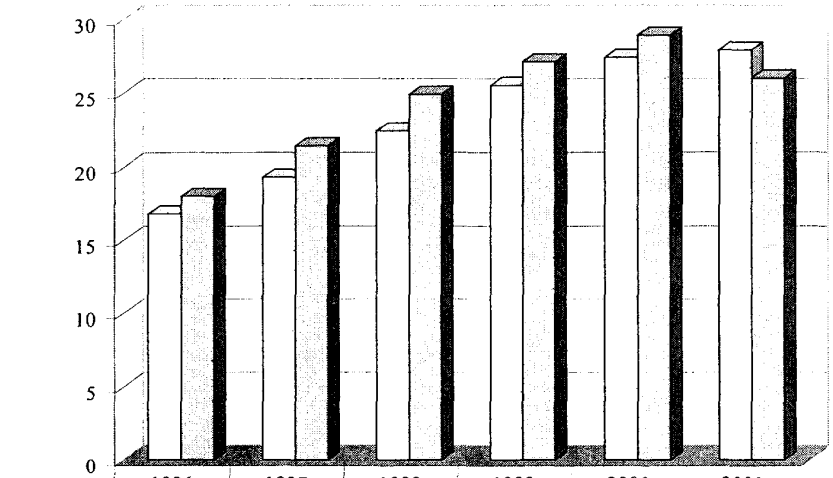
Actuarial Investment Return
Fire Safety



Actuarial Investment Return
Fire Safety

- Above assumes contributions, payments, etc. received evenly throughout year.
- 6/30/01:
  - Market Value return ≈ (7.23)%
  - Actuarial Value return ≈ 4.7%
- 6/30/02:
  - Market Value return ≈ (5.97)%
  - Actuarial Value return ≈ (3.6)%
- 6/30/03:
  - Market Value return through 1/31/03 ≈ (6.8)%

Asset Values (Millions)
Fire Safety



	1996	1997	1998	1999	2000	2001
Actuarial	16.8	19.3	22.4	25.5	27.4	27.9
Market	18.0	21.4	24.9	27.1	28.9	26.0

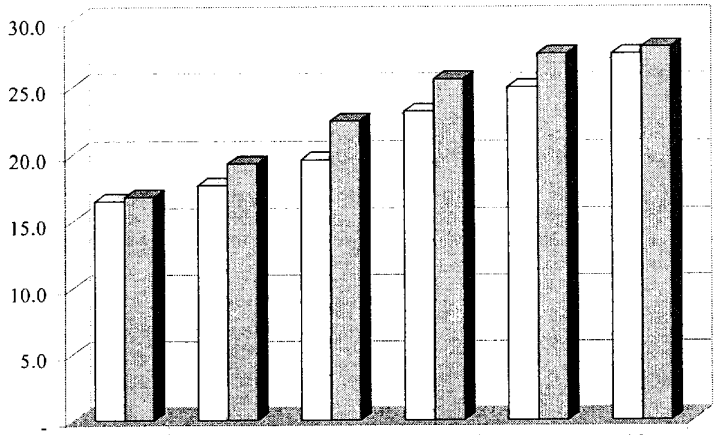
AON

Asset Values
Fire Safety

- 6/30/00 Actuarial Value ≈ 95% Market
- 6/30/01 Actuarial Value ≈ 107% Market
- 6/30/02 Actuarial Value will be ≈ 110% Market

AON

Funded Status (Millions)
Fire Safety



	1996	1997	1998	1999	2000	2001
Actuarial Liability	16.5	17.7	19.6	23.1	24.9	27.4
Actuarial Asset Value	16.8	19.3	22.4	25.5	27.4	27.9

AON

Funded Status
Fire Safety

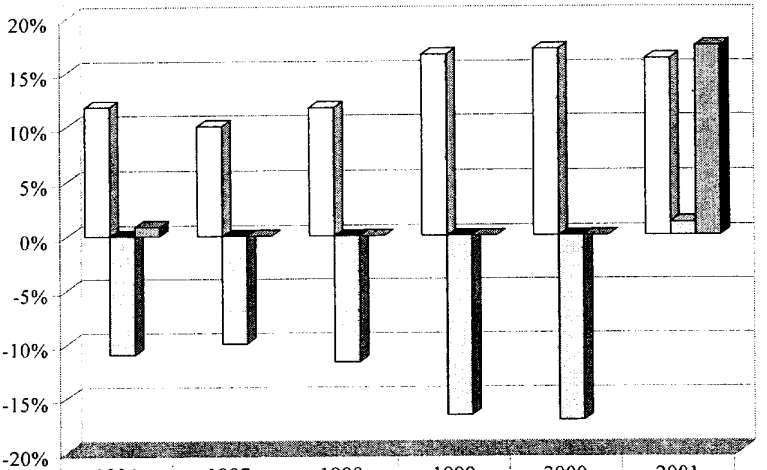
- 6/30/97 actuarial assumption changes:

		6/30/96	6/30/97
• Interest rate			
☐	General inflation	4.50%	3.50%
☐	Real rate of return	4.00	4.75
☐	Total	8.50	8.25
• Payroll growth		4.50%	3.75%

- Investment losses – Impact on funded status:
  - 6/30/02 [-5.97% compared to +8.25%] -14.3%
  - Actuarial asset "reserve" -7.3%
  - Total estimated % loss -21.6%
  - Total estimated $ loss [21.6% x $27.9] $ 6.0 million

AON

Contribution Rates
Fire Safety



	1996	1997	1998	1999	2000	2001
Normal Cost	11.8%	10.0%	11.7%	16.6%	17.1%	16.2%
Amort Bases	-11.0%	-10.0%	-11.7%	-16.6%	-17.1%	1.2%
Total	0.9%	0.0%	0.0%	0.0%	0.0%	17.4%

AON

Contribution Rates
Fire Safety

	6/30/00 2002/2003	6/30/01 2003/2004
■ Normal cost	**17.1%**	**16.2%**
■ Amortization bases:		
● Fresh Start 6/30/00	-17.1%	0.0%
● Fresh Start 6/30/01	0.0%	1.2%
Sub-total	-17.1%	1.2%
● **Total:**	**0.0%**	**17.4%**
● Amortization period	5 years	20 years

■ 6/30/02:
- Significant asset loss
- Actuarial gains or losses?

AON

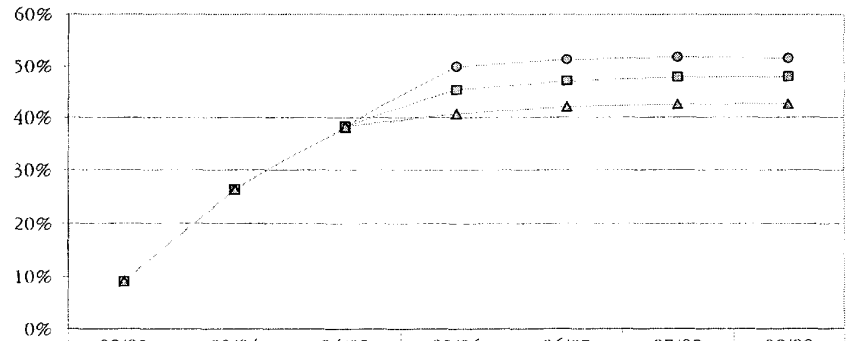
Contribution Projections
Fire Safety

- Market Value Investment Return:
  - June 30, 2002 -5.97%
  - Expected June 30, 2003 **8.25%**
    0.00%
    -5.00%
  - Expected June 30, 2004 and subsequent 8.25%
- Fresh Starts:
  - No Fresh Starts
- No Other:
  - Gains or Losses
  - Method or Assumption Changes
  - Benefit Improvements

AON

Contribution Projections
Fire Safety

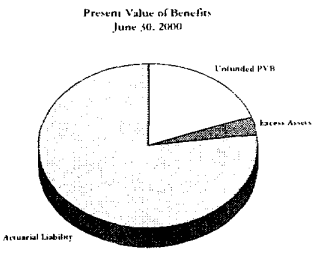
6/30/03 Market Value Return Varies
Includes City and Employee Contribution Rates

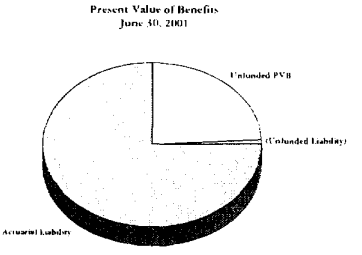


	02/03	03/04	04/05	05/06	06/07	07/08	08/09
-5.00%	9.0%	26.4%	38.3%	49.9%	51.3%	51.8%	51.6%
0.00%	9.0%	26.4%	38.3%	45.3%	47.1%	47.9%	48.0%
8.25%	9.0%	26.4%	38.3%	40.6%	41.9%	42.5%	42.5%

AON

Plan Funded Status
Police Safety



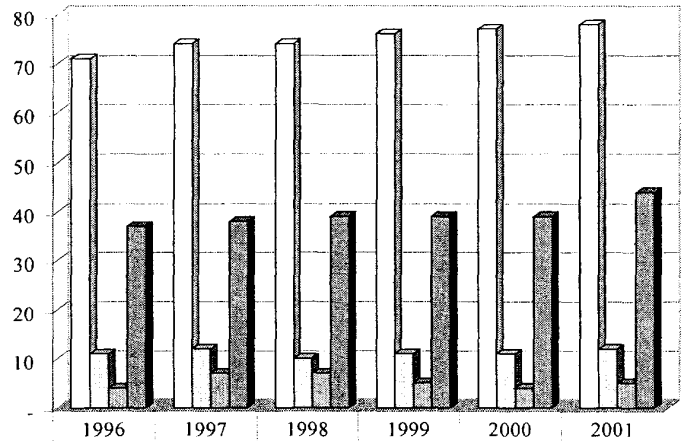


June 30, 2000		June 30, 2001
$ 7,900,000	**Unfunded PVB**	$ 11,100,000
1,400,000	**Excess Assets / (Unfunded Liability)**	(400,000)
31,200,000	**Actuarial Liability**	34,400,000
40,600,000	**PVB**	45,100,000

Plan Funded Status
Police Safety

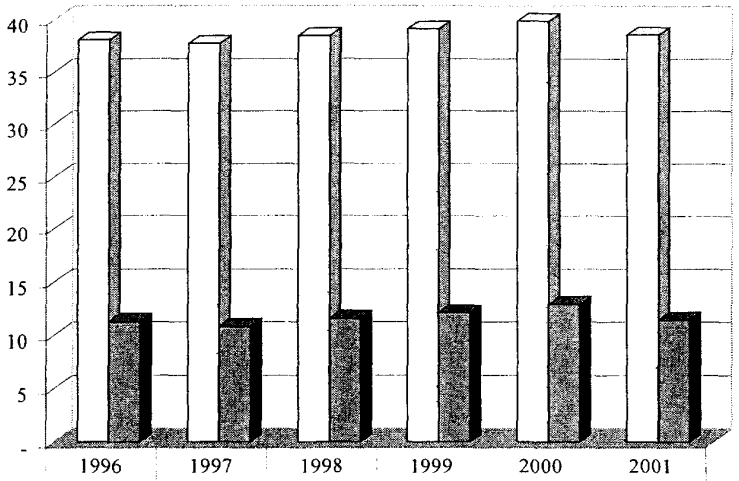
- What happened between 6/30/00 and 6/30/01?
  - Asset gain/(loss): ≈ (1.2) million
  - Actuarial gain/(loss): ≈ (0.7) million
    - Number of Retirees 39 → 44
  - Law Change: ≈ 0.2 million
    - 85% → 90%

Members Included in Valuation
Police Safety



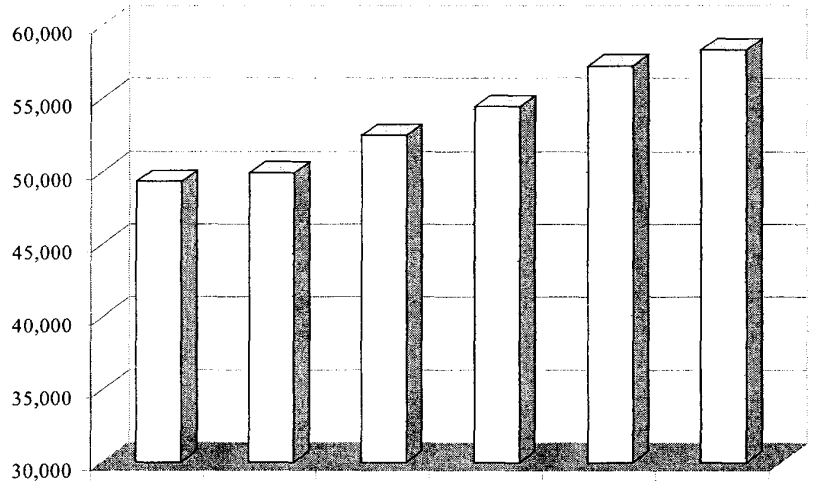
	1996	1997	1998	1999	2000	2001
Active	71	74	74	76	77	78
Transfers	11	12	10	11	11	12
Vested Terminations	4	7	7	5	4	5
Receiving Payments	37	38	39	39	39	44

Average Age/Service
Police Safety



	1996	1997	1998	1999	2000	2001
Average Age	38.1	37.7	38.5	39.1	39.9	38.6
Average Service	11.3	10.8	11.6	12.1	12.9	11.4

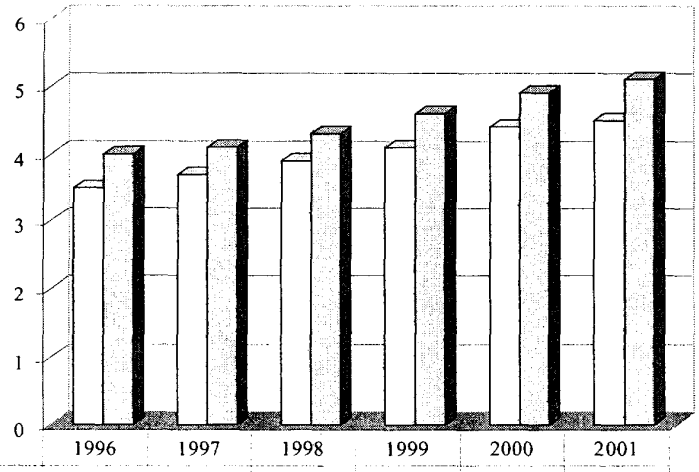
Average Pay
Police Safety



	1996	1997	1998	1999	2000	2001
☐ Average Pay	49,300	49,900	52,400	54,400	57,200	58,300

AON

Total Annual Covered Payroll (Millions)
Police Safety



	1996	1997	1998	1999	2000	2001
☐ Annual Covered Pay	3.5	3.7	3.9	4.1	4.4	4.5
☐ Proj. Covered Pay	4.0	4.1	4.3	4.6	4.9	5.1

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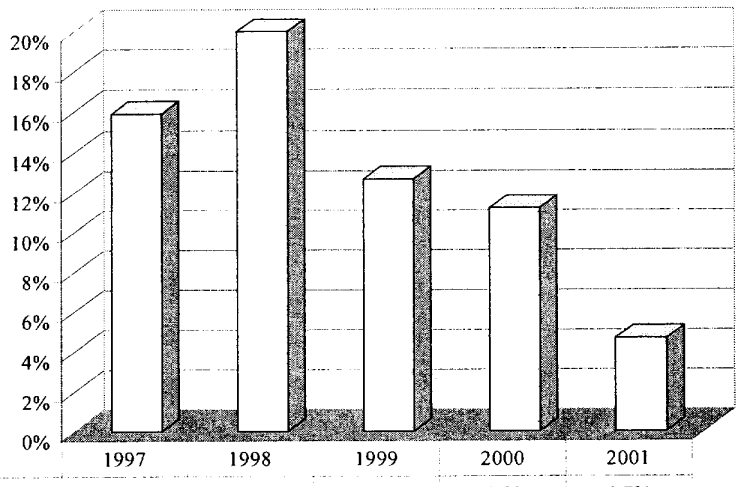
Actuarial Investment Return
Police Safety

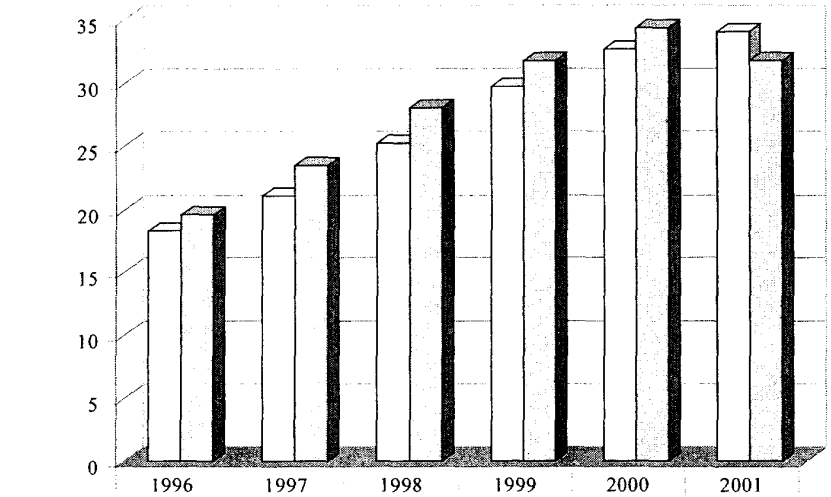


	1997	1998	1999	2000	2001
Investment Return	15.9%	20.0%	12.7%	11.2%	4.7%

Actuarial Investment Return
Police Safety

- Above assumes contributions, payments, etc. received evenly throughout year.
- 6/30/01:
  - Market Value return ≈ (7.23)%
  - Actuarial Value return ≈ 4.7%
- 6/30/02:
  - Market Value return ≈ (5.97)%
  - Actuarial Value return ≈ (3.7)%
- 6/30/03:
  - Market Value return through 1/31/03 ≈ (6.8)%

Asset Values (Millions)
Police Safety



	1996	1997	1998	1999	2000	2001
☐ Actuarial	18.3	21.1	25.2	29.7	32.6	34.0
☐ Market	19.6	23.5	28.0	31.7	34.3	31.7

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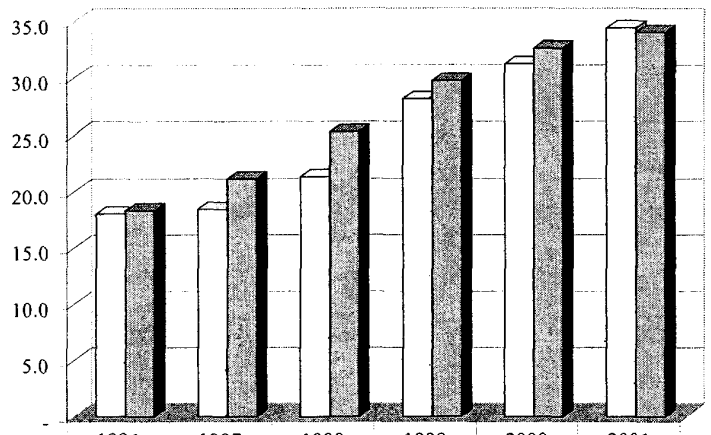
Asset Values
Police Safety

- 6/30/00 Actuarial Value ≈ 95% Market
- 6/30/01 Actuarial Value ≈ 107% Market
- 6/30/02 Actuarial Value will be ≈ 110% Market

AON

Funded Status (Millions)
Police Safety



	1996	1997	1998	1999	2000	2001
Actuarial Liability	18.0	18.4	21.3	28.1	31.2	34.4
Actuarial Asset Value	18.3	21.1	25.2	29.7	32.6	34.0

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Funded Status
Police Safety

- 6/30/97 actuarial assumption changes:
  - Interest rate

	6/30/96	6/30/97
General inflation	4.50%	3.50%
Real rate of return	4.00	4.75
Total	8.50	8.25

  - Payroll growth: 4.50% → 3.75%

- Investment losses – Impact on funded status:
  - 6/30/02 [-5.97% compared to +8.25%]: -14.3%
  - Actuarial asset "reserve": -7.4%
  - Total estimated % loss: -21.7%
  - Total estimated $ loss [21.7% x $34]: $ 7.4 million

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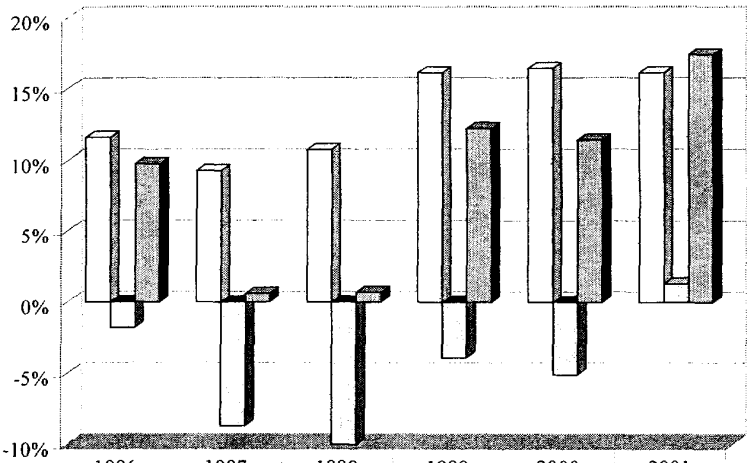
Contribution Rates
Police Safety



	1996	1997	1998	1999	2000	2001
Normal Cost	11.6%	9.3%	10.7%	16.1%	16.4%	16.1%
Amort Bases	-1.8%	-8.7%	-10.0%	-3.9%	-5.1%	1.3%
Total	9.8%	0.6%	0.7%	12.2%	11.4%	17.4%

Contribution Rates
Police Safety

	6/30/00 2002/2003	6/30/01 2003/2004
■ Normal cost	**16.4%**	**16.1%**
■ Amortization bases:		
● Gain/Loss	-13.0%	-
● Benefit Change 6/30/98	5.9%	-
● Benefit Change 6/30/00	1.4%	-
● Assumption Change 6/30/97	-2.0%	-
● Assumption Change 6/30/98	2.6%	-
● Fresh Start 6/30/01	0.0%	1.3%
Sub-total	-5.1%	1.3%
● **Total:**	**11.4%**	**17.4%**
● Amortization period	Multiple	20 years
■ 6/30/02:		
● Significant asset loss		
● Actuarial gains or losses?		

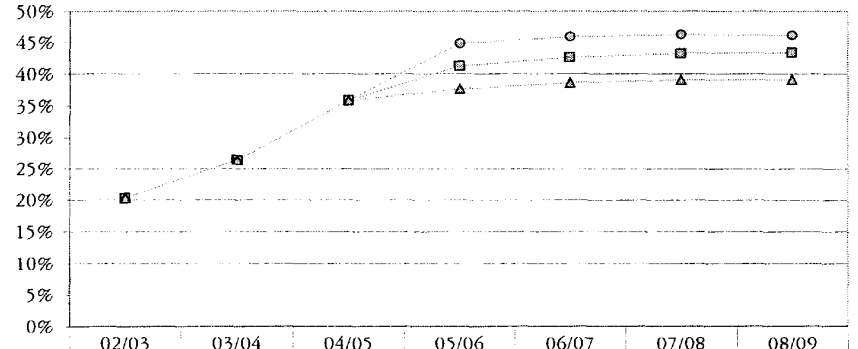
Contribution Projections
Police Safety

- Market Value Investment Return:
  - June 30, 2002 -5.97%
  - Expected June 30, 2003 **8.25%**
    0.00%
    -5.00%
  - Expected June 30, 2004 and subsequent 8.25%
- Fresh Starts:
  - No Fresh Starts
- No Other:
  - Gains or Losses
  - Method or Assumption Changes
  - Benefit Improvements

AON

Contribution Projections
Police Safety

6/30/03 Market Value Return Varies
Includes City and Employee Contribution Rates



	02/03	03/04	04/05	05/06	06/07	07/08	08/09
-5.00%	20.4%	26.4%	35.8%	44.9%	46.0%	46.3%	46.2%
0.00%	20.4%	26.4%	35.8%	41.2%	42.6%	43.3%	43.4%
8.25%	20.4%	26.4%	35.8%	37.6%	38.6%	39.0%	39.1%

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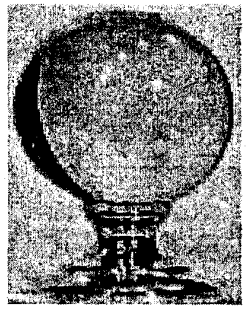
filed 5-18-03

League of California Cities - Employee Relations Institute

Actuarial Projections: Crystal Ball or Scientific Method



Ron Seeling

Chief Actuary, CalPERS

Thursday January 30, 2003

Monterey, CA

CalPERS

Impact of Recent Investment Performance

Break even

		Market Value Basis	
Fiscal Year	Needed	Achieved	Difference
1996-1997	8.25%	20.1%	11.9%
1997-1998	8.25%	19.5%	11.3%
1998-1999	8.25%	12.5%	4.3%
1999-2000	8.25%	10.5%	2.3%
2000-2001	8.25%	-7.2%	-15.5%
2001-2002	8.25%	-5.9%	-14.2%
2002-2003		-5.25	

30% decline on market funded value of plan

On a market value basis, the compounded rates of return over the last 5, 10 and 15 years are as follows:

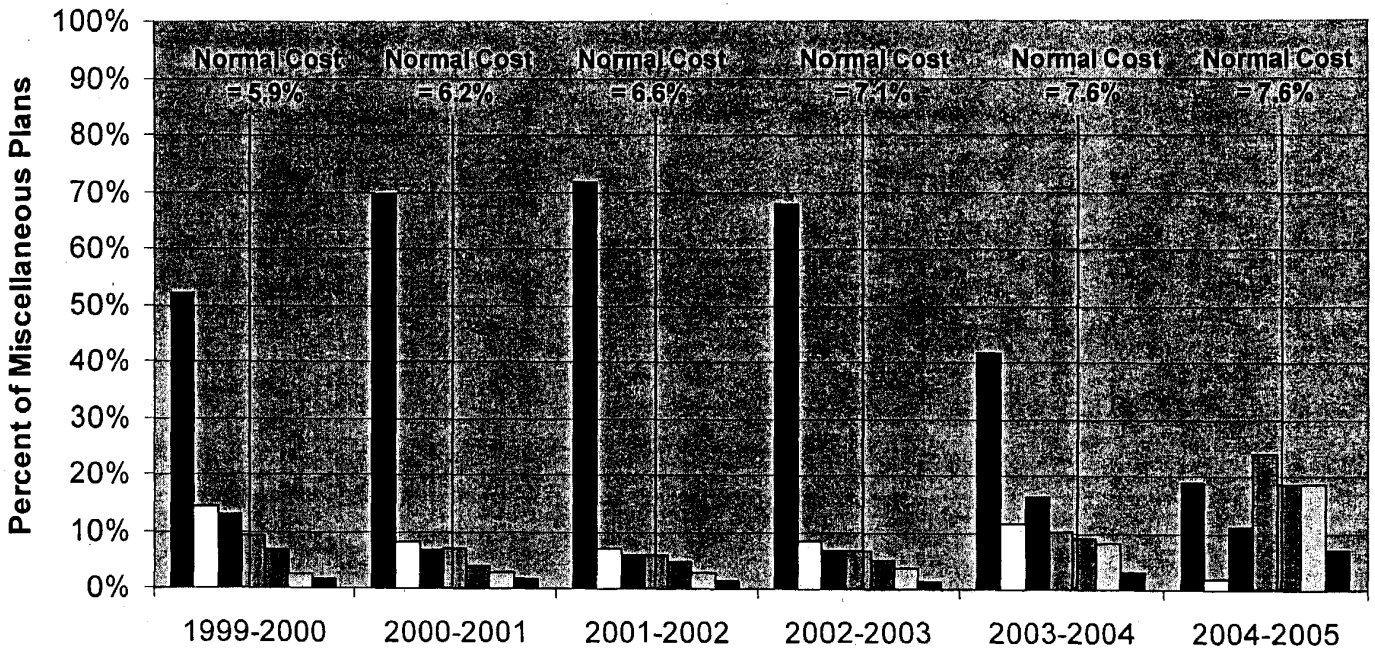
Compounded Return over Last 5 Years	5.3%
Compounded Return over Last 10 Years	9.3%
Compounded Return over Last 15 Years	9.4%

CalPERS

Difference
7.25%
what was received

Impact of Recent Investment Performance

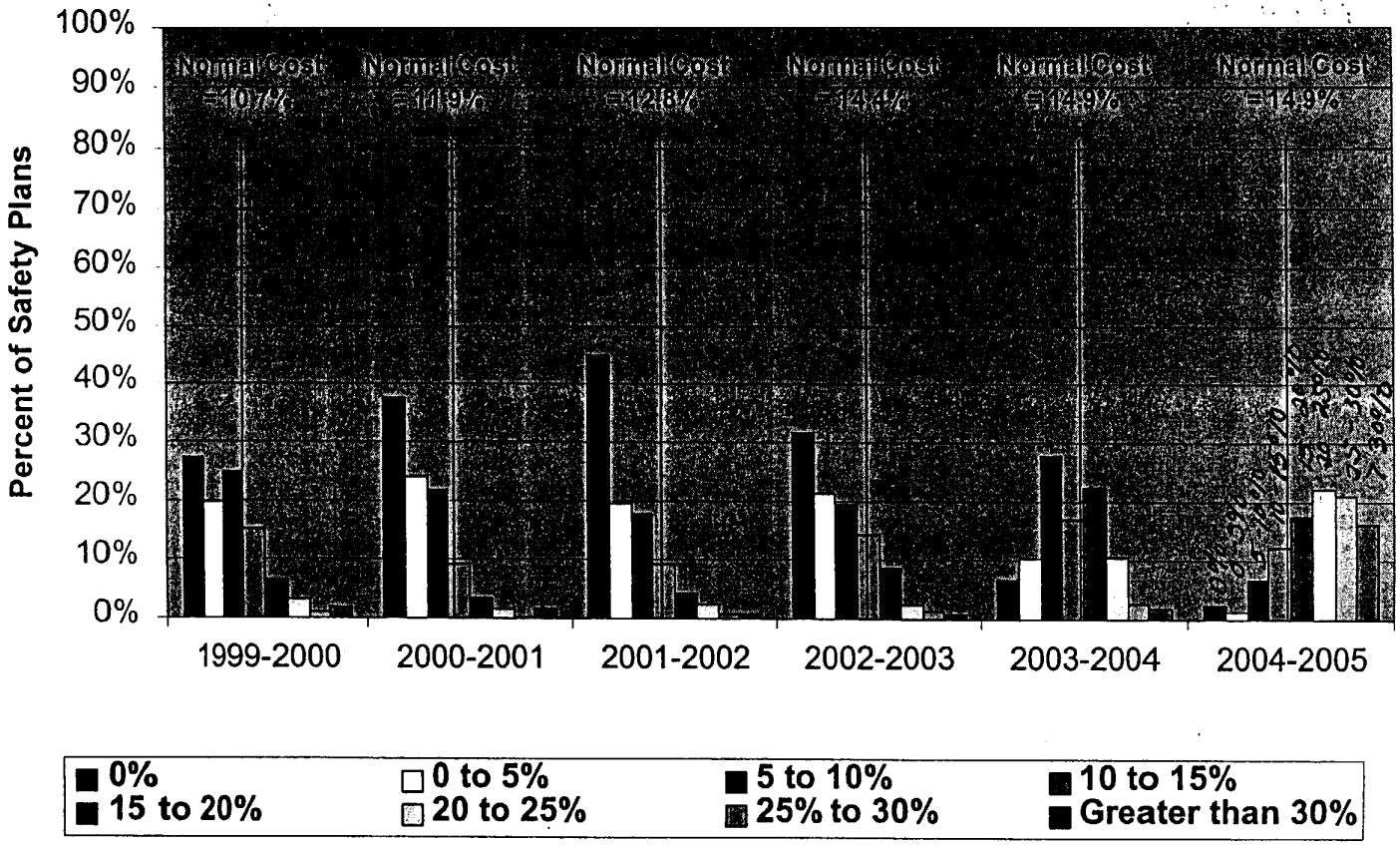
Distribution of Employer Contribution Rates
Miscellaneous Plans



6/30 | 12/31/02 -5.25

Impact of Recent Investment Performance

Distribution of Employer Contribution Rates
Safety Plans



Actuarial Projections There Are Lots of Unknowns

- What's happened in the past is known. What will happen in the future is not.
- Consider the following:
  - There are over 300 possible ways for a person just hired at age 25 to end their active career. In each year in the future for the next 50 years or so, this individual could:
    - Quit and take a refund of their own contributions (plus 6% interest)
    - Quit and, if vested after 5 years of service, leave their own contributions on deposit and draw a pension starting at or after age 50
    - Become disabled due to a job related event
    - Become disabled due to a non-job related event
    - Die due to a job related event
    - Die due to a non-job related event
    - Retire and commence their pension at or after age 50 with 5 or more years of service.

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There Are Lots of Unknowns

- An inactive member, i.e. one who terminated and left money on deposit, can at any time decide to withdraw their contributions or after age 50 start their pension.
- In almost every case, the amount of the benefit to be paid is currently not known because it will depend on the age and service as of that unknown future date and, in most cases will also depend on the employee's final salary (also unknown until that unknown date in the future).
- Once the benefit is known and has begun, whether for retirement, disability, or survivor benefits, it is unknown how long that benefit will be paid. It depends on how long the individual will live and perhaps on how long a beneficiary lives.
- All of the points made above are about liability (i.e. benefits). A bigger unknown is the return on assets (current assets as well as future contributions) from the time received until the last individual currently in the plan draws their last benefit and dies.

CalPERS

Attacking the Unknown
Actuarial Valuations and Rate Setting

- So, what's an actuary to do?
  - Make assumptions about all of these unknowns. These are not haphazard assumptions.
  - By studying past experience and taking potential future economic and demographic changes into account, the actuary develops demographic (or non-economic) assumptions which assign probabilities to each potential future for each active, inactive, and retired member of your plan.
  - By studying past experience and taking potential future economic changes into account, the actuary develops economic assumptions which provide projected salary growth for active employees, cost-of-living increases for retirees, and most importantly the assumed investment return for many years into the future.

CalPERS

Attacking the Unknown Actuarial Valuations and Rate Setting

- How does the actuary use these assumptions to set rates?
  - The actuary uses these assumptions as follows:
    - a probability of occurrence is assigned to each and every possible future outcome for each member of your plan.
    - The assumption about salary growth is used to estimate future member contributions as well as all future benefits that are to be paid.
    - the assumed investment return is used to estimate how much of those future benefits will be paid by interest earned on existing assets as well as future employee and employer contributions.
  - The process described above is accomplished by a complex computer program called an actuarial valuation system.

CalPERS

Attacking the Unknown Actuarial Valuations and Rate Setting

– Based on all of the actuarial assumptions, the actuarial valuation program computes a "bunch of stuff" which when added up across all members of your plan can be summarized as:

1) if all assumptions are **exactly realized** (**never going to happen exactly year by year**), how much money would be sufficient to pay for all future benefits if neither employee nor employer contributed for these members in the future.[**Present Value of Benefits**- if your assets are at least this big, you're superfunded].

2) if all assumptions are **exactly realized**, what percent of pay must the employer contribute on behalf of existing active employees in order to accumulate just the right amount just in time to pay all benefits in the future. [**Normal Cost** - or annual premium if there is no surplus nor unfunded liability].

3) if all assumptions are **exactly realized**, how much money is necessary to be on schedule, i.e. this amount together with future employee contributions and employer normal costs will accumulate to just the right amount just in time to pay all benefits in the future. [**Accrued Liability** - if your assets are less than this you have unfunded liability and if your assets are more than this, you have surplus].

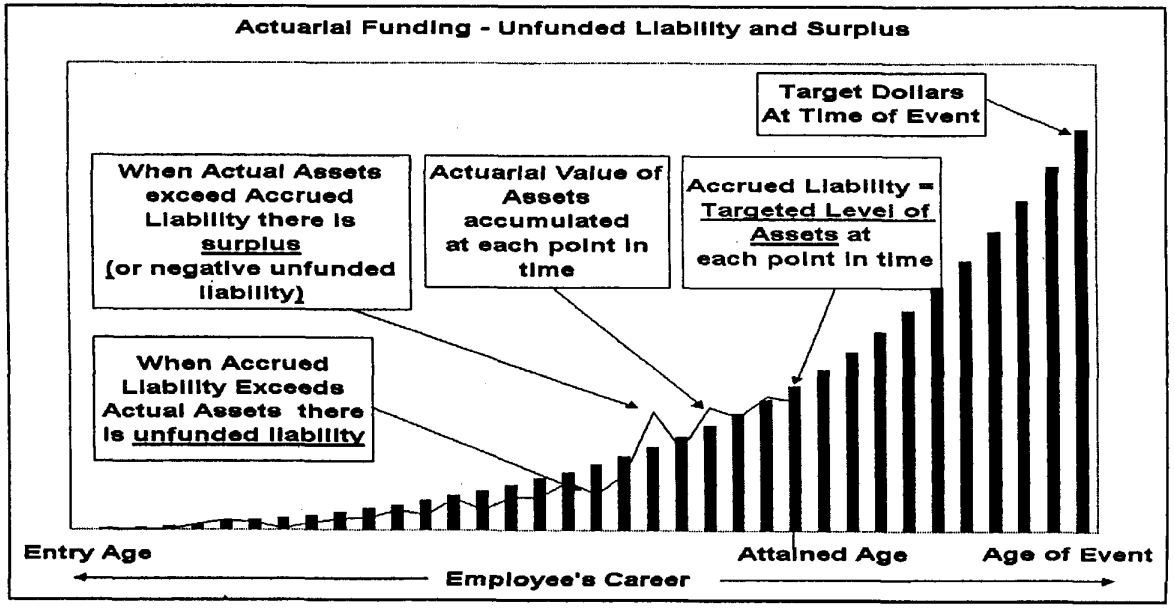
CalPERS

Attacking the Unknown
Actuarial Valuations and Rate Setting

- Your contribution rate for the coming year is set equal to the normal cost (annual premium) plus /minus the amortization of unfunded liability/surplus based upon amortization policies adopted by the CalPERS Board.

- So, your contribution rate is based on a "bunch of stuff" that is calculated assuming that all actuarial assumptions will be exactly realized in the future.

• A picture may be worth a lot of words.



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Attacking the Unknown Does It Work?

- Sometimes
- On the liability side, it works a lot better for large plans than for small ones because the liabilities for large plans are much more predictable than those for small plans. A recent study by CalPERS actuaries shows that the difference in liability between what was predicted by the assumptions and what really happened was 2 to 6 times larger for small plans than for large plans.
- On the asset side, plan size doesn't really matter at CalPERS because assets are commingled for investment purposes (but not for the purpose of paying benefits).
- When events with very low probability occur there is little that the actuary can do. During fiscal years 2000-01 and 2001-02 liabilities grew 8.25% (the assumed investment return) while the market value of assets went down -7.2% and -5.9% respectively. This is about a 30% swing in market value funded status over two years.
- With CalPERS asset mix, there was about a 10% chance of getting a return of -7.2% or less for fiscal 2000-01 and about a 12% chance of getting a -5.9% or less return for fiscal 2001-02. So, there was only about a 1% chance of having these past two years' returns.

CalPERS

Attacking the Unknown
Try to MAKE it work

- While the calculations and concepts are very scientific, unless reality is "close" to what's assumed, it's only about as good as using a crystal ball.
- To compensate for the fact that the actuarial assumptions are expected long term averages **NOT** what is expected each and every year, the actuary does several things:
  - Performs this valuation annually, determines actuarial "gains and losses" (i.e. differences between what was expected for the past year and what really happened) and amortizes these gains/losses over time to smooth out their impact on employer rates.
  - Amortizes increases in accrued liability due to changes in plan benefits, or changes in actuarial methods or assumptions over 20 years to smooth out their impact.

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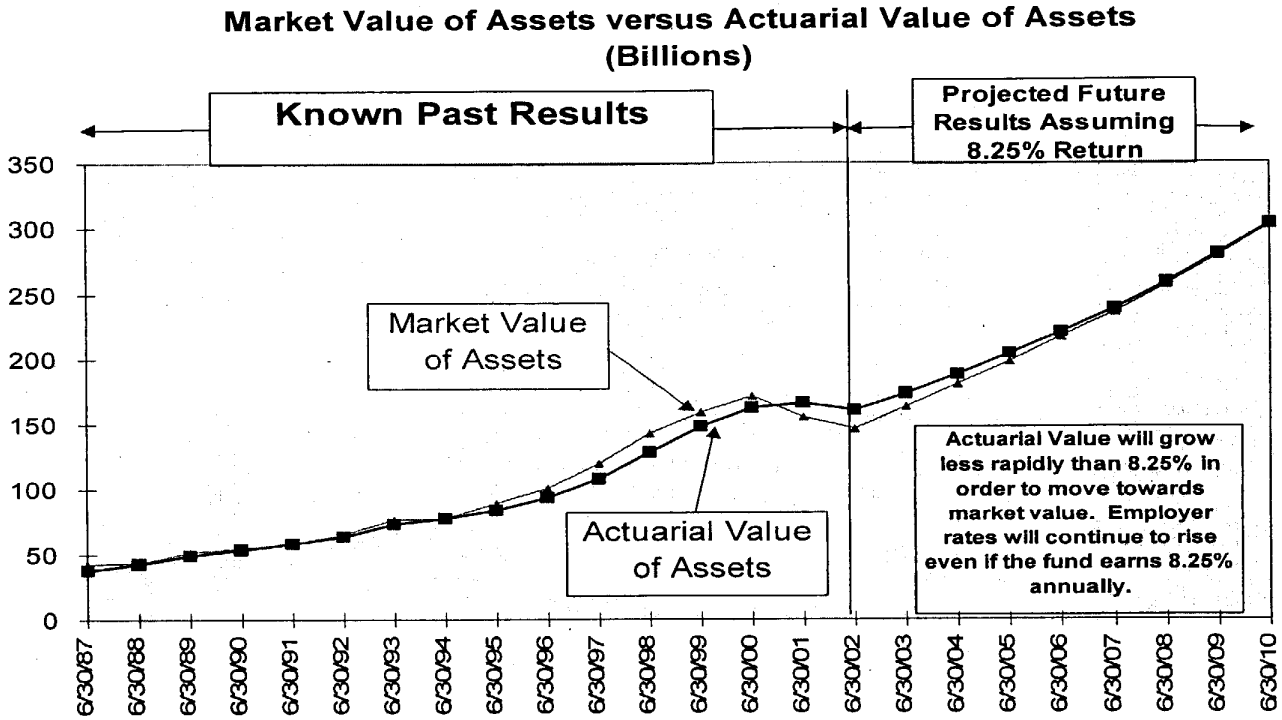
Attacking the Unknown
Try to MAKE it work

- To compensate...
  - Uses a "smoothed" actuarial value of assets rather than market value to set rates. This dampens swings in the market value of assets.



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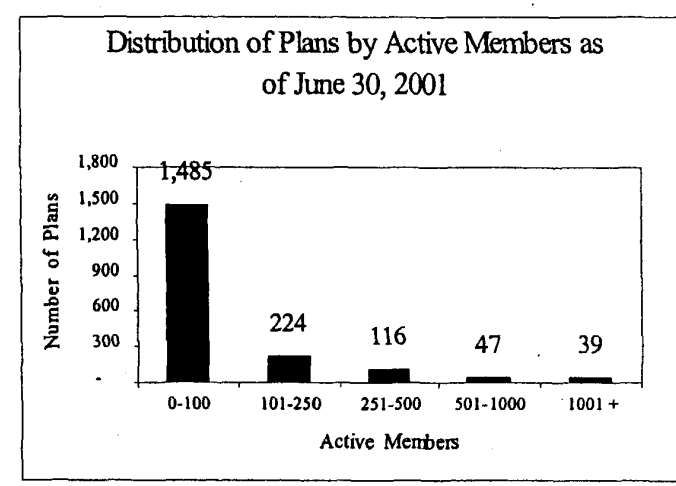
Attacking the Unknown
Try to MAKE it work

- Unfortunately, there is little additional that can be done about the volatility in assets.
  - Different asset allocation - more conservative with higher more stable rates vs more aggressive with lower more volatile rates.
  - Change smoothing technique - could produce pressure on the CalPERS Board to use this to push for benefit improvements.
- To compensate for liability swings CalPERS will pool small plans which will really help. (< 100 employees)

Number of Actives in Plan	Number of Plans	Total Number of Actives
0	99	-
1-10	513	2,464
11-20	254	3,803
21-50	352	11,907
51-100	267	18,824
Subtotal	1,485	36,998
0-100	1,485	36,998
101-250	224	35,153
251-500	116	39,568
501-1000	47	32,454
1001 +	39	90,359
Total	1,911	234,532



What's important in the Actuarial Report

- The most important thing to know and remember is that the actuarial report is a "snap shot" based on participants, assets, and benefits under contract as of the valuation date.
- There is a lot of information in the report that addresses "What has happened since last year." and very little that addresses the unknown "What will happen in the future."
- The other very important thing to remember is that the report is predicated upon the fact that each and every actuarial assumption will be realized exactly in the future.
- Even if the assumptions are good long term predictors of the average future experience of the plan, each year's experience will undoubtedly deviate from the average (a lot or a little) and produce variances in the plan's funded status and employer contributions.

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What's important in the Actuarial Report

- As far as reading the report to see the current status of the plan and how things changed from the previous valuation the important information is as follows:
  - The Executive Summary of pages 2 and 3 gives the major results of the valuation, including a section entitled "Changes Since Prior Valuation".
  - Page 4 of your report contains a comparison of all key results from the last valuation and this one.
  - Page 6 shows a technical calculation of the gains/losses that occurred over the past year.
  - Page 8 provides a breakdown of the change in employer contributions by cause of the change.
  - Page 9 gives a reconciliation of your plan's market value of assets over the past year.
  - Page 7 provides a historic breakdown of the plan's unfunded liability/surplus, gives a reason for each "base" and provides amortization information about each "base".

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What's important in the Actuarial Report

- As far as trying to look into the future from reading the report, you should know the following.
  - While your rates will change in the future, there are only a few causes for the changes:
    - You change benefits
    - CalPERS changes actuarial methods or assumptions
    - Amortization bases drop off as they are completed
    - New actuarial gains and losses occur
- Changes in benefits or actuarial methods or assumptions should not come as surprises. You need to be watchful for legislatively mandated benefit changes. CalPERS will endeavor in the future to give advanced warning when it makes changes in actuarial methods or assumptions.
- Carefully analyzing page 7 in your actuarial valuation report will help you plan for bases that drop off. Your actuary can "fresh start" but should discuss this with you first.
- An exception is that the amortization of gains and losses which, without new gains or losses, is actually a declining percentage of pay over time.

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What's <u>important</u> in the Actuarial Report

- Future gains and losses are unpredictable, but a few words are in order.
  - Whenever actual experience differs from the actuarial assumptions, there are gains or losses. New hires, pay increases, terminations, disabilities, deaths, or retirements will all affect the rate.
  - Small plans are much more volatile and unpredictable.
  - **Plans whose assets and or liabilities are very large compared to their payroll are much more susceptible to rate swings than plans with assets and liabilities that are not as large compared to their payroll.**
  - Pay attention to the actuarial value of assets compared to market value. Asset smoothing will always move the actuarial value towards 100% of market value. If the plan has an actuarial value greater than market value, smoothing will produce asset losses when the market value return is exactly 8.25%. The reverse is also true, smoothing produces asset gains when the actuarial value of assets are less than market value and 8.25% is earned.

CalPERS

Actuarial Projections

- The potential for future volatility from year to year will now be demonstrated by our model.
- We will show what can happen to employer rates due to typical gains and losses.

CalPERS

MEMORANDUM FROM THE OFFICE OF THE CITY ATTORNEY

DATE: March 13, 2003

TO: Honorable Mayor & City Council Members

FROM: Randy Hays, City Attorney

RE: Retirement System

At a recent City Council meeting Council Member Beckman framed a broad question regarding the existence of/necessity for/authority for a City to have a retirement system. This memo is intended to respond to that generic inquiry.

Lodi, being what is termed a general law city, not a charter city, finds its operation guided to a large extent by the provisions of the California Government Code (G.C.). Much of what is in that code provides authority for a City to do something but does not require that it be done. Such is the case relative to a retirement system. Once the choice to have a system is made there are rules to follow since such a choice brings reliance on that system into play.

G.C. §45300 titled Legislative Intent states:

> It is the intent of this article to enable any city to adopt such a retirement system as is adaptable to its size and type.

That section is followed by G.C. §45301 titled:

> Establishment of System which reads as follows:
>
> By ordinance, any city may establish a retirement system for its officers and employees and provide for the payment of retirement allowances, pensions, disability payments, and death benefits, or any of them.

From these two sections it is clear that a city is authorized to set up, fund, operate and administer it own retirement program. Certainly some cities could implement their own system. I believe that is the case with Los Angeles. However, most cities are not a size which would allow them to fund and staff such a system. This was recognized by the legislature as evidenced by G. C.§45345 titled "Alternative method; contract with State Employee's Retirement System" which reads:

> As an alternate method of providing a retirement system, the city may contract with the Board of Administration of the State Employee's Retirement System and enter all or any portion of its employees under such system pursuant to law and under the terms and conditions of such contract.

Note that the name of the State system was changed in 1967 to "Public Employee's Retirement System." Section 45345 simply does not reflect that name change. This allowed alternative is the course of action most often followed by cities. The provisions of the Public Employee's Retirement System law beginning at §20000 apply at such time as the alternative method of establishing a retirement system is chosen by a city.

cc: Dixon Flynn